



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,288	02/18/2004	Floyd Backes	160-042	3344
34845	7590	10/20/2005	EXAMINER	
STEUBING AND MCGUINNESS & MANARAS LLP			HOLLIDAY, JAIME MICHELE	
125 NAGOG PARK			ART UNIT	
ACTON, MA 01720			PAPER NUMBER	
			2686	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/781,288

Applicant(s)

BACKES, FLOYD

Examiner

Jaime M. Holliday

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted on October 28, 2004, April 28, 2005, May 27, 2005 and October 4, 2005 have been considered by the Examiner and made of record in the application file.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

a) On **page 3 line 15**, replace "Figure 8" with --Figures 8A and 8B-- in order to match drawings;

b) On **page 4 line 17**, replace "Figure 18" with --Figures 18A and 18B-- in order to match drawings;

c) On **page 6 line 3**, replace "Figure 33" with --Figures 33A and 33B-- in order to match drawings;

d) On **page 23 line 1**, replace "Figure 8" with --Figures 8A and 8B-- after "to" in order to match drawings;

e) On **page 34 line 6**, replace "Figure 18" with --Figures 18A and 18B-- after "in" in order to match drawings.

Appropriate correction is required.

***Claim Objections***

3. **Claims 1 and 2** are objected to because of the following informalities:

**Claims 1 and 2** use the term "logic" within an apparatus claim. The term logic implies a method step. The Examiner suggests the term "means" when referring to pieces in an apparatus claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claim 1** is rejected under 35 U.S.C. 102(e) as being anticipated by **Kallio (Pub # U.S. 2004/0014422 A1)**.

Consider **claim 1**, Kallio clearly shows and discloses an invention that enables terminal devices to efficiently transition from a first access point to a second access point based on service discovery information that is transmitted by the second access point. The current access point establishes a link with the terminal device; sends service description data to the terminal device; and authenticates the link with the second access point using a group key based on

the service description data, reading on the claimed "apparatus for use by a station in a wireless communications environment wherein multiple channels are available for communication." Terminal device **402** enters a page scan state, where it awaits one or more paging messages. Access point **406** enters a paging mode and transmits one or more paging packets. These paging packets each include an identification number based on the address of terminal device. Meanwhile, during this step, terminal device (which is in page scan mode) responds to the paging packets by transmitting a packet that includes its address, reading on the claimed "logic for receiving Announce messages from access points, the Announce messages indicating the access points' presence and protocol capability to the station; logic for sending Bid messages to an access point to indicate that the station desires to communicate in the wireless communications environment via the access point." The access point receives this packet from terminal device. In response, access point transmits a frequency hop synchronization (FHS) packet. The FHS packet is used to pass information that allows terminal device to synchronize with the frequency hopping sequence of access point. Upon receipt of this FHS packet, terminal device transmits a further packet to confirm receipt of the FHS packet. Both terminal device and access point enter into the connection state at this point, reading on the claimed "receiving an Accept message from the access point in response to the Bid message, the Accept message indicating that the access point will allow the

station to communicate in the wireless communications environment via the access point," (figures 8 and 10, paragraphs 13, 15, 134 and 135).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kallio (Pub # U.S. 2004/0014422 A1)** in view of **Idnani et al. (Pub # U.S. 2004/0121765 A1)**.

Consider **claim 2**, and **as applied to claim 1 above**, Kallio clearly shows and discloses the claimed invention except that chooses the access point that will provide better wireless communications performance than the current access point.

In the same field of endeavor, Idnani et al. clearly show and disclose a Session Initiation Protocol (SIP) proxy user agent (UA) to serve as a gateway between a SIP core network and a SIP-unaware mobile, reading on the claimed "apparatus for use by a station in a wireless communications environment." A new message is described, a combined registration and event subscription message, which is used by SIP proxy UAs to both register a new contact address for a mobile and to subscribe to the mobile's contact information. When mobile station (MS) **101** begins obtaining service from base station (BS) **111** it sends a registration request message to SIP component **120**. This registration request message **202** is not a SIP message, but rather a registration message in accordance with the wireless protocol utilized by MS. The registration request message is received by SIP proxy UA **123**, via the wireless network interface **121**. Acting as a proxy user agent for the mobile station, SIP proxy UA then sends a combined registration and event subscription message for MS **101** to SIP registrar/presence server **130**, reading on the claimed access point." Proxy UAs are responsible for translating the call control messaging between SIP and the appropriate wireless protocol, reading on the claimed "logic for sending a registration request message to the access point to indicate that the station desires to communicate in the wireless communications environment via the access point using a particular protocol." In response to message, SIP registrar sends SIP OK message to SIP proxy UA, reading on the claimed "logic for receiving a registration acknowledge message from the access point in response

to the Registration Request message, the registration acknowledge message indicating that the access point understands that the station will communicate in the wireless communications environment using the particular protocol," (figures 1 and 2, paragraphs 8, 14, 15 and 30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to register via proxy to a as taught by Ildnani et al. in the terminal device of Kallio in order to efficiently complete a transition or handover.

9. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kallio (Pub # U.S. 2004/0014422 A1)** in view of **Feder et al. (U.S. Patent # 6,522,881 B1)**.

Consider **claim 3**, and as applied to **claim 1** above, Kallio clearly shows and discloses the claimed invention except that chooses the access point that will provide better wireless communications performance than the current access point.

In the same field of endeavor, Feder et al. clearly show and disclose a method and apparatus for use in a wireless communications network that searches for the best serving access point of a base station as a function of communication quality. Each base station **200** includes five access points (AP) that are assigned a different 1MHz channel, reading on the claimed "apparatus for use by a station in a wireless communications environment wherein multiple channels are available for communication." A wireless modem **270** in a fixed



wireless network executes an AP search/selection sequence in response to a triggering event, such as when service quality degrades below a threshold level. After detecting beacons and obtaining a communication link quality metric for each neighboring access point, the wireless modem selects the best access point based on the communication link quality metric, reading on the claimed "bid message is sent by the station to the access point if the station ascertains that the access point is likely to provide better wireless communications performance than another access point through which the station is currently communicating," (abstract, column 2 lines 59-63, column 3 lines 6-10, column 4 lines 6-11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select an access point with the best communication link quality as taught by Feder et al. in the terminal device of Kallio in order to efficiently complete a transition or handover.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. **Claims 1-3** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **claims 1-3** of copending Application No. 10/780,800. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claims logic which performs identical functions.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

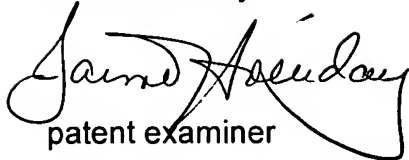
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime M. Holliday whose telephone number is (571) 272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jaime Holliday

  
patent examiner

  
NICK CORSARO  
PRIMARY EXAMINER